

REMARKS

Claims 1-13 are all the claims pending in the application. Claim 1 has been amended to recite the transitional phrase "consisting essentially of" to exclude the presence of additional components that materially affect the novel and basic characteristics of the present invention.

Entry of the above amendment is respectfully requested.

Claims 1, 2, 4, 6 and 8 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by JP 10-183085 ("JP '085"). In addition, claim 7 rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over JP '085.

The rejections are respectfully traversed for at least the reasons of record and for the additional following reasons.

Independent claim 1 is directed to a partially crosslinked adhesive-supported on a porous film for battery separator, consisting essentially of a porous film substrate having supported thereon a partially crosslinked adhesive that is partially crosslinked by preparing a reactive polymer having a functional group in the molecule and capable of being crosslinked upon reaction with a polyfunctional compound having reactivity with the functional group and then reacting the reactive polymer with a polyfunctional compound.

Paragraphs [0026] and [0027] of JP '085 disclose the use of a binder, which is a tackifier. The tackifier is generally an amorphous oligomer having a molecular weight of from several hundred to several thousand and a thermoplastic elastomer, which is in solid or liquid state at room temperature. The tackifier is often mixed with a high molecule polymer for the purpose of imparting pressure-sensitive adhesiveness, improving adhesiveness, and

lowering viscosity.

However, in a case where a tackifier is used in a battery cell as a separator, since a polar solvent is used as an electrolyte, a side reaction occurs due to the tackifier, which is a low molecular component. Thus, a binder is not used in the present invention and is excluded from claim 1.

In addition, in the Advisory Action, the Examiner notes that the disclosure on page 12 of the specification shows that "[f]or example, when heating and reaction are carried out at a temperature of 50°C for 7 days, usually, crosslinking reaction of the reactive polymer with the polyfunctional compound is completed, and the resulting partially crosslinked reactive polymer (partially crosslinked adhesive) becomes stable in terms of characteristics."

It is submitted that the disclosure cited by the Examiner on page 12 of the specification corresponds to the formation of the partially crosslinked adhesive (i.e., in Example 1 of the present invention, the adhesive is partially crosslinked by being placed in a thermostat at 50°C for 7 days) and not to the complete crosslinking step (i.e., in Example 1, the partially crosslinked adhesive is then placed in a thermostat at a temperature of 50°C for an additional 7 days to complete the crosslinking). Thus, the lack of the teaching of the second step in JP '085 shows that the adhesive of JP '085 is not partially crosslinked since the second step in Example 1 does not merely complete the step of partial crosslinking.

The Examiner further asserts in the Advisory Action that Applicants essentially agreed with the Examiner's Official notice in the Office action mailed September 17, 2007 at page 5, that "reduced adhesive surface coverage is common and well known, motivated by the desire

to adjust the amount of adhesiveness and/or a reduced cost. It would have been obvious to one of ordinary skill in the art of adhesive to modify the invention of JP '085 accordingly."

Applicants respectfully disagree. With respect to the function of a battery, Applicants stated that it is preferable that the supporting ratio of an adhesive is lower, but rather the contrary is preferable when adhesion to a battery is considered. Thus, the Examiner's statement is overbroad and generalized, and not consistent with Applicants' comments set forth in the Response dated December 17, 2007. Moreover, the Examiner asserts that reducing adhesive surface coverage is common and well known while Applicants do not agree that it is common or well known to reduce adhesive surface coverage when adhesion to a battery is considered.

In sum, it is submitted that JP '085 does not disclose, teach or suggest claim 1 and that claim 1 patentable over the cited art.

Claims 2, 4, 6, 7 and 8 and depend, directly or indirectly, from claim 1, and thus, it is respectfully submitted that these claims are patentable for at least the same reasons as claim 1.

For the foregoing reasons, withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of claims 1-13 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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